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10/576,705

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Rex Allan Mason

JAMES117.001APC

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09/24/2010

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EXAMINER

WEIER, ANTHONY J

ART UNIT

PAPER NUMBER

1781

NOTIFICATION DATE

DELIVERY MODE

09/24/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/576,705 | Applicant(s) MASON, REX ALLAN | |
| | Examiner Anthony Weier | Art Unit 1781 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2006 and 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>11/3/06 and 7/24/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 01117755.

JP 01117755 discloses a device and method for using said device wherein foam is avoided. In particular, JP 01117755 discloses said device having a conduit in the form of a spiral jacket which is in contact with at least a part of the exterior surface of the fluid treatment system (steam pipe, 11 in container 1) and wherein said conduit contains a thermally conductive media (e.g. steam, water) and including a heat transfer function wherein the temperature of the media (as well as the contents of container 1) are controlled and maintained at a particular temperature. It is considered inherent that the conduit is fitted in such a way as to adequately control the temperature of the fluid within the container (as called for in claim 6) because of the recitation that the contents of the container are "maintained at 90-95 C" and because foaming is eliminated.

JP 01117755 further discloses the method of using the device wherein fluid (soy milk) is introduced into the system and the temperature of media (steam) in the conduit is controlled to avoid foaming by steps including maintaining the fluid at a certain temperature (see Abstract; Figures).

3. Claims 1, 2, 6-8, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by

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Soden.

Soden discloses a system for treating milk (see Figures) and method for using same wherein milk introduced into a tank wherein the exterior plate is in contact with a conduit which contains cooling or heating fluid which has been heated or cooled by heat exchangers, the temperature of the milk therein being controlled in such a manner that it contributes to the benefit that "all foaming problems are effectively eliminated" (e.g. col. 3, lines 34-50). The system would further have no dead spots where the media flow rate is insufficient to adequately control the temperature of the fluid because of the use of stirring within the container in conjunction with the placement of the conduit used for cooling (or heating).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01117755.

If it is shown that the device of JP 01117755 does not disclose the spiral jacket being fitted around the external surface of the container, it would have been obvious to one having ordinary skill in the art at the time of the invention to have done so to, for example, avoid difficulty in cleaning the interior of the container from inevitable caked product on the heat transfer conduit.

6. Claims 3, 4, 5, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soden taken together with Kuppan.

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Although Soden does not specifically disclose that the cooling/heating conduit is in the form of a spiral jacket, such arrangement in similar heating/cooling systems is notoriously well known as taught, for example, by Kuppan (pages 369, 370), and it would have been obvious to one having ordinary skill in the art at the time of the invention to have included such format for the reasons set forth by Kuppan (page 370) including to conserve installation and servicing space.

The claims further call for the use of water as the thermally conductive media. Soden is silent regarding a particular coolant but does specify that "any appropriate coolant or refrigerating fluid may be supplied to the coil" (col. 3, lines 29-33). Water is notoriously well known for use in systems for cooling and heating (e.g. page 369 of Kuppan under "Construction Material"), and it would have been further obvious to have incorporated water as the coolant/heating media as a matter of preference depending on ease of availability and low cost.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier
Primary Examiner
Art Unit 1781

/Anthony Weier/
Primary Examiner, Art Unit 1781

Anthony Weier
September 20, 2010